REMARKS

This communication is in response to the Office Action dated October 24, 2005. Claims 1-31 and 37 are pending in the present Application. Claims 32-36 have been withdrawn from consideration. Claims 1-31 and 37 have been amended for clarification. Claims 1-31 and 37 have been rejected. 1-31 and 37 remain pending in the present Application.

An aspect of the present invention provides a method for forming a plurality of thin-film devices. The method includes providing a flexible substrate and utilizing a self-aligned imprint lithography (SAIL) process to form the plurality of thin-film devices on the flexible substrate wherein the SAIL process comprises depositing at least one material over the flexible substrate, forming a 3D structure over the at least one material and patterning the at least one material in accordance the desired characteristics of the plurality of thin-film devices.

§112 Rejections

The Examiner states:

> Claims 1-31 and 37 are rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-31 and 37 recite a self-aligned imprint lithography process and use the acronym SAIL. The use of an acronym that is not well known outside the applicant's own work is acceptable, but cannot be used to define the invention over the prior art. The applicant's specification defines SAIL as a lithography process that involves "contact between a master with features" and the "substrate material to be patterned". This appears to be the same as other imprint lithography methods such as nano-imprint lithography, step and flash imprint lithography or hot embossing lithography. Without further definition of the process, the use of a specialized acronym throughout the claims as a means to claim an invention and set it apart from the prior art is confusing, and will be interpreted by the examiner as a general imprint lithography process.

Applicant asserts that claims 1-31 and 37 have been amended for clarification and although Applicant does not agree with the Examiner's above-delineated stipulation claim 1-31 and 37 are set apart from the prior art by means described below. Consequently, the Examiner's rejection under 35 USC 112 second paragraph is moot and no longer applicable.

§102 Rejections

Claims 1, 17 and 37

For ease of review, Applicant reproduces amended independent claims 1, 17 and 37:

1. A method for forming a plurality of thin-film devices comprising:

providing a flexible substrate; and

utilizing a self-aligned imprint lithography (SAIL) process to form the plurality of thin-film devices on the flexible substrate wherein the SAIL process comprises:

depositing at least one material over the flexible substrate;

forming a 3D structure over the at least one material; and

patterning the at least one material in accordance with the desired characteristics of the plurality of thin-film devices.

17. A system for forming a plurality of thin-film devices comprising:

means for utilizing a SAIL process in conjunction with a flexible substrate to form a plurality of thin-film devices on the flexible substrate wherein the means for utilizing a SAIL process comprises:

means for depositing at least one material over the flexible substrate;

means for forming a 3D structure over the at least one material; and

means for patterning the at least one material in accordance with the desired characteristics of the plurality of thin-film devices.

37. A method for forming a plurality of thin-film devices comprising:

providing a non-flexible substrate; and

utilizing a self-aligned imprint lithography (SAIL) process to form the plurality of thin-film devices on the non-flexible substrate wherein the SAIL process comprises:

depositing at least one material over the flexible substrate;

forming a 3D structure over the at least one material; and

patterning the at least one material in accordance with the desired characteristics of the plurality of thin-film devices.

The Examiner states:

> **Claims 1, 17 and 37 are rejected under 102(e) as being anticipated by Chou (US 2002/0132482).**

Applicant respectfully disagrees. The present invention includes a method and system for forming a plurality of thin-film devices. Varying embodiments of the method and system allow a self-aligned imprint lithography (SAIL) process to be utilized to form a plurality of thin-film devices on a flexible substrate. Consequently, a roll-to-roll manufacturing process can be employed in

conjunction with the SAIL process to provide a low cost manufacturing solution for large area and/or flexible displays.

Claim 1 recites a method for forming a plurality of thin-film devices. The method includes providing a flexible substrate and utilizing a self-aligned imprint lithography (SAIL) process to form the plurality of thin-film devices on the flexible substrate wherein the SAIL process comprises depositing at least one material over the flexible substrate, ***forming a 3D structure over the at least one material*** and patterning the at least one material in accordance the desired characteristics of the plurality of thin-film devices.

The Examiner states that the Chou reference anticipates the present invention. Applicant respectfully disagrees and asserts that the reference does not disclose ***forming a 3D structure over the at least one material*** as recited in claims 1, 17 and 37. The Chou reference provides an improved method of imprint lithography involves using direct fluid pressure to press the mold into a substrate-supported film. Advantageously the mold and/or substrate are sufficiently flexible to provide wide area contact under the fluid pressure. Fluid pressing can be accomplished by sealing the mold against the film and disposing the resulting assembly in a pressurized chamber. It can also be accomplished by subjecting the mold to jets of pressurized fluid. The result of this fluid pressing is enhanced resolution and high uniformity over an enlarged area.

Applicant asserts that although the Chou reference discloses the utilization of a mold in a fluid pressure process, ***Chou does not teach or suggest the step of forming a 3D structure over a material as recited in the independent claims of***

the present invention. Paragraph 0020 of Chou discloses the utilization of the mold and reads:

> FIG. 2 illustrates a typical mold 10 with protruding features and a substrate 20 bearing a moldable thin film 21 for use in the process of FIG. 1. The mold comprises a body 11 and a molding layer 12 including a plurality of protruding features 13 having a desired shape. The mold body 11 and the molding layer 12 are typically fused quartz, glass or ceramic. The molding layer 12 can be patterned into features 13 of nanoscale dimensions using electron beam lithography and etching techniques well known in the art. The thickness of layer 21 is typically in the range 0.1 nm-10 .mu.m, and the extent of protruding features 13 is typically in the range 0.1 nm-10 .mu.m.

Applicant asserts that this paragraph does not discloses anything related to the formation of a 3D structure over deposited material as recited in the independent claims of the present invention. Applicant fails to see how the Examiner can equate forming a 3D structure over deposited material, as recited in the independent claims of the present invention, with the utilization of the mold in a fluid pressure process as disclosed in the Chou reference. For example, according to an embodiment of the present invention, a stamping tool is utilized to form the 3D structure over the deposited material. ***The Chou reference does not disclose this step or any step for forming a 3D structure over deposited material as recited in the independent claims of the present invention.***

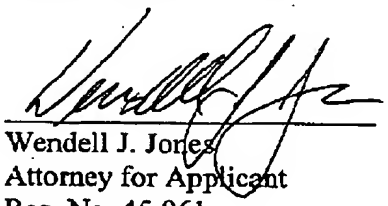
Consequently, since the Chou reference does not disclose the step of forming a 3D structure over deposited material, as recited in the independent claims of the present invention, the Chou reference does not anticipate the present invention. Accordingly, independent claims 1, 17 and 37 are allowable over the Chou reference.

Claims 2-16 and 18-31

Since claims 2-16 and 18-31 are respectively dependent on claims 1 and 17, the above-articulated arguments with regard to independent claims 1 and 17 apply with equal force to claims 2-16 and 18-31. Accordingly, claims 2-16 and 18-31 should be allowed over the Examiner's cited reference.

Applicant believes that this application is in condition for allowance. Accordingly, Applicant respectfully requests reconsideration, allowance and passage to issue of the claims as now presented. Should any unresolved issues remain, Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,



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